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CLAIMS

1. (Amended) A method for producing a stress impedance effect element, the method comprising:

connecting opposite ends of a magnetostrictive amorphous thin wire and respective electrodes by ultrasonic bonding;

forming a groove in an elastic thin substrate having a thermal expansion coefficient equal to that of the magnetostrictive amorphous thin wire;

installing the magnetostrictive amorphous thin wire in the groove; and

bonding together the magnetostrictive amorphous thin wire and the elastic thin substrate by applying an insulating adhesive.

2. The method for producing a stress impedance effect element according Claim 1, wherein the magnetostrictive amorphous thin wire is a negative magnetostrictive amorphous thin wire.

3. The method for producing a stress impedance effect element according Claim 1, wherein the magnetostrictive amorphous thin wire has a diameter of not more than 20 micrometers.

4. (Deleted)

5. (Amended) A stress impedance effect element

comprising:

(a) an elastic thin substrate having a thermal expansion coefficient equal to that of a magnetostrictive amorphous thin wire, and having a groove formed therein;

(b) electrodes each formed at a respective one of the opposite ends of the magnetostrictive amorphous thin wire, by ultrasonic bonding; and

(c) an insulating adhesive applied to the groove formed in the elastic thin substrate for bonding the magnetostrictive amorphous thin wire to the groove.

6. The stress impedance effect element according Claim 5, wherein the magnetostrictive amorphous thin wire comprises a negative magnetostrictive amorphous thin wire.

7. The stress impedance effect element according Claim 5, wherein the magnetostrictive amorphous thin wire has a diameter of not more than 20 micrometers.

8. (Deleted)